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TFW E126894

PTO/SB/21 (04-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	09/920,241	
Filing Date	August 1, 2001	
First Named Inventor	Roo, Piete	
Art Unit	2682	
Examiner Name	Yun, Eugene	
Total Number of Pages in This Submission	Attorney Docket Number	MP0088

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): PTO Form 1449 with 27 Ref. cited, 18 US Ref.-not attached, 5 Foreign Ref.-attached and 4 Other Ref.-attached; and Return Postcard
Remarks The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name	Michael D. Wiggins	Reg. No.	34,754
Signature					
Date	January 5, 2006				

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Donna Senn	Express Mail Label No.	EV 717 344 239 US (1/5/2006)
Signature		Date	January 5, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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EV 717 344 239 US

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL
for FY 2005**☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) \$180.00**Complete if Known**

Application Number 09/920,241

Filing Date August 1, 2001

First Named Inventor Roo, Pierre

Examiner Name Yun, Eugene

Art Unit 2682

Attorney Docket No. MP0088

METHOD OF PAYMENT (check all that apply)☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) : _____☒ Deposit Account Deposit Account Number: 08-0750 Deposit Account Name: Harness, Dickey & Pierce, P.L.C.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s)☒ Credit any overpayments

Under 37 CFR 1.16 and 1.17

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 (including Reissues)

Small Entity

Fee (\$)

Each independent claim over 3 (including Reissues)

Fee (\$)

Multiple dependent claims

Fee (\$)

Total Claims**Extra Claims****Fee (\$)****Fee Paid (\$)**

_____ -20 or HP= 0 x _____ = 0

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims**Extra Claims****Fee (\$)****Fee Paid (\$)**

_____ - 3 or HP= 0 x _____ = 0

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims

Fee (\$)

Fee Paid (\$)

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____ / 50 = _____ (round up to a whole number) x _____	_____	_____

4. OTHER FEE(S)

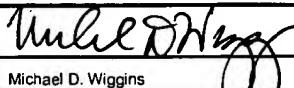
Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Information Disclosure Statement

Fees Paid (\$)

\$180

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	34,754	Telephone	(248) 641-1600
Name (Print/Type)	Michael D. Wiggins	Date	January 5, 2006		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



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FEE TRANSMITTAL for FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$) \$180.00

Complete if Known

Application Number	09/920,241
Filing Date	August 1, 2001
First Named Inventor	Roo, Pierre
Examiner Name	Yun, Eugene
Art Unit	2682
Attorney Docket No.	MP0088

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) : _____

☒ Deposit Account Deposit Account Number: 08-0750 Deposit Account Name: Harness, Dickey & Pierce, P.L.C.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) ☒ Credit any overpayments

Under 37 CFR 1.16 and 1.17

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Fee (\$)

50

Each independent claim over 3 (including Reissues)

200

Multiple dependent claims

360

Small Entity Fee (\$)

25

100

180

Total Claims

Extra Claims

Fee(\$)

Fee Paid (\$)

_____ -20 or HP= 0 x _____ = 0

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims

Extra Claims

Fee(\$)

Fee Paid (\$)

_____ - 3 or HP= 0 x _____ = 0

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims

Fee (\$)

Fee Paid (\$)

3. APPLICATION SIZE FEE

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Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	= 0	/ 50 = 0 (round up to a whole number) x		= 0

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge) : Information Disclosure Statement

Fees Paid (\$)

\$180

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	34,754	Telephone	(248) 641-1600
Name (Print/Type)	Michael D. Wiggins	Date	January 5, 2006		

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If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/920241
Filing Date: 08/01/2001
Applicant: Roo, Pierte
Group Art Unit: 2682
Examiner: Yun, Eugene
Title: Apparatus and Method for Converting Single-Ended Signals to a Differential Signal, and Transceiver Employing Same
Attorney Docket: MP0088

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 CFR § 1.56 and the requirements of MPEP § 2001.06(c), and in accordance with the practice under 37 CFR §§ 1.97 and 1.98, the Examiner's attention is directed to the document listed on the enclosed PTO-1449.

In accordance with 37 CFR § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited is or is considered to be material to patentability as defined in 37 CFR § 1.56(b), nor as an admission that the information constitutes prior art within the meaning of 35 USC §§ 102 and/or 103.

It is respectfully requested that the information listed on the PTO-1449 be considered by the Examiner, and that an initialed copy of the PTO-1449 be returned indicating that such information was considered.

This IDS is being filed before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution. No certification is provided; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

01/09/2006 NNGUYEN1 00000040 09920241

01 FC:1806

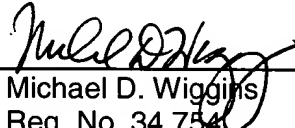
180.00 DP

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees or certification fees for Information Disclosure Statements.

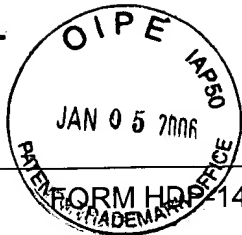
Should the Examiner have any questions, Applicant's undersigned attorney is reachable by telephone at (248) 641-1211. The correspondence address of record is provided below.

Respectfully submitted,

Dated: 1-5-06

By: 
Michael D. Wiggins
Reg. No. 34,754

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600



FORM HDP-1449 (Based on Form PTO-1449)

**PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET NO.

SERIAL No.

MP0088

09/920,241

APPLICANT

Roo, Piete

FILING DATE

GROUP

August 1, 2001

2682

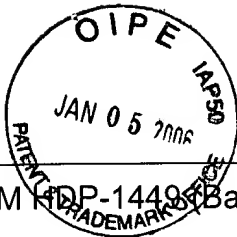
U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		4,112,253	9/1978	Wilhelm		
2.		4,152,541	5/1979	Yuen		
3.		4,393,370	7/1993	Hareyama		
4.		5,388,092	2/1995	Koyama et al		
5.		5,666,354	9/1997	Cecchi et al		
6.		5,796,725	8/1998	Muraoka		
7.		5,822,426	10/1998	Rasmus et al		
8.		5,825,819	10/1998	Cogburn		
9.		5,864,587	1/1999	Hunt		
10.		6,201,841		Iwamatsu et al		
11.		6,744,931		Komiya et al		
12.		6,468,032 B1	6/2002	Lye et al		
13.		6,576,746 B2		McBride et al		
14.		4,535,206	8/1985	Falconer		
15.		4,878,244	10/1989	Gawargy		
16.		RE 30,111	10/1979	Blood, Jr.		
17.		5,887,059	3/1999	Xie et al		
18.		6,577,114	6/10/2003	Roo, Piete		

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 2 of 2

ATTORNEY DOCKET No.	SERIAL No.
MP0088	09/920,241
APPLICANT	
Roo, Piete	
FILING DATE	GROUP
August 1, 2001	2682

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.		WO 99/46867	9/1999	Agazzi et al			
2.		WO 00/28663 A2	5/2000	Hatamian et al			
3.		WO 00/28663 A3	5/2000	Hatamian et al			
4.		WO 00/28691 A2	5/2000	Agazzi et al			
5.		WO 00/28691 A3	5/2000	Agazzi et al			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.		Sailesh Rao; Short Course: Local Area Networks, International Solid State Circuits Conference; Sailesh Rao; Outline Implementing Gigabit Ethernet Over Cat-5 Twisted-Pair Cabling; Jack Kenny; Signal Processing and Detection in Gigabit Ethernet; 3 pages
2.		Kamran Azadet and Chris Nicole; Low-Power Equalizer Architectures for High-Speed Modems; October 1998; pages 118-126
3.		Techdictionary.com definition of decoder, Link: http://www.teghdictionary.com ; 1 page
4.		University of Pennsylvania CSE Digital Logic Lab re decoders. Link: http://www.cse.dmu.ac.uk/~sexton/WWW/Pages/cs2.html ; 3 pages

Examiner:

Date Considered:

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